

REMARKS

This responds to the Office Action mailed on December 26, 2008. Claims 1 and 9 are amended. Claim 15 is currently canceled. Claim 16 was previously canceled without prejudice or disclaimer. Claim 17 is added. As a result, claims 1-14 and 17 are now pending in this application.

Applicant respectfully submits that the amendments to the claims are fully supported by the specification, as originally filed, and no new matter has been added. Applicant hereby respectfully requests further examination and reconsideration of the application in view of the following remarks.

Interview Summary

Applicant thanks Primary Examiner Ralph Gitomer and Examiner Amanda Wood for the courtesy of a telephone interview on March 3, 2009 with Applicant's representative Michael P. Horvath. Independent claim 1 and dependent claims 9 and 15 were discussed with respect to the references cited in the present rejection. Although no agreement was reached, for at least the reasons below, Applicant submits that amending claim 1 to include the subject matter of claim 15 would appear to overcome the rejection of record.

The subject matter of claim 9 was briefly discussed with respect to the references cited in the present rejection. Examiner Wood stated that she would require some time to further review the cited references and indicated that she would call Applicant's representative the following day to further discuss claim 9. However, Applicant's representative never received a return call from Examiner Wood. As such, Applicant has presented new claim 17 herein, which includes the subject matter of claims 1 and 9, and submits that new claim 17 overcomes the rejection of record because none of the cited references, alone or in combination, include "two of the cell cultures, each of a different type, are established on a single gas-permeable membrane within the at least one cell culture chamber for a direct co-cultivation of both cell cultures, wherein one of the two of the cell cultures is established on a first side of the gas-permeable membrane, and the other of the two of the cell cultures is established on a second side of the gas-permeable membrane", as is recited in new claim 17.

§ 103 Rejection of the Claims

Claims 1-15 were rejected under 35 U.S.C. § 103(a) as being obvious over the combination of Kearney, as cited previously, in view of Delucas et al. (U.S. Patent No. 6,447,726) in further view of Pfaller, as cited previously. In view of the foregoing amendments and following remarks, Applicant respectfully traverses this rejection.

Applicant has canceled claim 15, thereby rendering the rejection of claim 15 moot.

Applicant submits that the references, in combination with the reasoning set forth in the Office Action, does not describe each and every recitation of claims 1-14. For instance, Applicant cannot find in the references, in combination with the reasoning set forth in the Office Action "continuous microscopic observation include[ing]: automatically determining cell contours during movement of the camera; automatically storing the determined cell contours on the computer software; and automatically recognizing those stored determined cell contours when the camera again moves past the cell culture chamber later on during the observation", as recited in amended independent claim 1.

Applicant cannot find any description in the references, either alone or in combination, or any discussion in the Office Action regarding continuous microscopic observation including automatically determining cell contours during movement of the camera; automatically storing the determined cell contours on the computer software; and automatically recognizing those stored determined cell contours when the camera again moves past the cell culture chamber later on during the observation. While the Office Action at pages 4-5 contends that Delucas et al. includes "a video camera monitoring and translation mechanism", the Office Action does not point out and the Applicant cannot find in the references, either alone or in combination, the above-cited recitations of amended claim 1. Delucas et al. describes a Video Command and Monitoring System (VCMS) and states:

The VCMS will perform the following operations while on ISS: Automatically scan all the viewable cells on a given tray twice daily and take a "snap shot"; store the digitized "snap shot" until it can be downlinked; place the images into a name specific file that can be interpreted on the ground as being a specific protein, and store the image with the file generated with Task I; move to a particular position and take a "snap shot" when given a command from the ground or by a crew member; capture the image and

compress it using the best compression algorithms available possible with the given hardware; transfer health and status data from the NGTC to the EXPRESS Rack and eventually attach temperature data with the images for the database; and encryption of images before placing into the packet of data to be down-linked.

(Delucas et al. at col. 15, line 58 – col. 16, line 5.) However, Applicant submits that the VCMS of Delucas et al. does not perform “continuous microscopic observation include[ing]: automatically determining cell contours during movement of the camera; automatically storing the determined cell contours on the computer software; and automatically recognizing those stored determined cell contours when the camera again moves past the cell culture chamber later on during the observation”, as recited in amended independent claim 1.

Also, Applicant cannot find in the references, alone or in combination, “two of the cell cultures, each of a different type, are established on a single gas-permeable membrane within at least one cell culture chamber for a direct co-cultivation of both cell cultures, wherein one of the two of the cell cultures is established on a first side of the gas-permeable membrane and the other of the two of the cell cultures is established on a second side of the gas-permeable membrane”, as recited in amended claim 9. The Office Action at page 5 admits that “Kearney and Delucas et al do not expressly teach a method wherein one cell culture, each of a different type, is established on both sides of a gas-permeable membrane inside at least one cell culture for the purpose of a direct co-cultivation of both cell cultures.” The Office Action contends that “Pfaller teaches a method wherein different cell types are cultured on both sides of a gas permeable membrane in a cell culture chamber for direct co-cultivation.” However, Applicant cannot find any description in Pfaller regarding two different types of cell cultures established on different sides of a single gas-permeable membrane. Referring to Figs. 1 and 5 of Pfaller, it appears that cells 2 are disposed on only one side of a microporous growth support 1. (*See also* Pfaller at col. 2, lines 43-47.) Applicant submits that the arrangement described in Pfaller does not appear to include “two of the cell cultures, each of a different type, are established on a single gas-permeable membrane within at least one cell culture chamber for a direct co-cultivation of both cell cultures, wherein one of the two of the cell cultures is established on a first side of the gas-permeable membrane and the other of the two of the cell cultures is established on a second side of the gas-permeable membrane”, as recited in amended claim 9.

For at least these reasons, Applicant submits that the references, in combination with the reasoning set forth in the Office Action, does not describe each and every recitation of claims 1 and 9.

Dependent claims 2-14 depend from independent claim 1. Accordingly, each of these claims incorporate the features of claim 1. At least for reasons analogous to those stated above with respect to claim 1, claims 2-14 are accordingly believed to be patentable. For brevity, Applicant defers (but reserves the right to present) further remarks, such as concerning any dependent claims, which are believed separately patentable.

For at least these reasons, Applicant submits that claims 1-14 are allowable over the references, in combination with the reasoning set forth in the Office Action, and respectfully requests reconsideration and withdrawal of this rejection.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's representative at (612) 359-3275 to facilitate prosecution of this application.

If necessary, please charge any additional fees or deficiencies, or credit any overpayments to Deposit Account No. 19-0743.

Respectfully submitted,

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Date

March 26, 2009

By



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CERTIFICATE UNDER 37 C.F.R. 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 26 day of March, 2009.

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